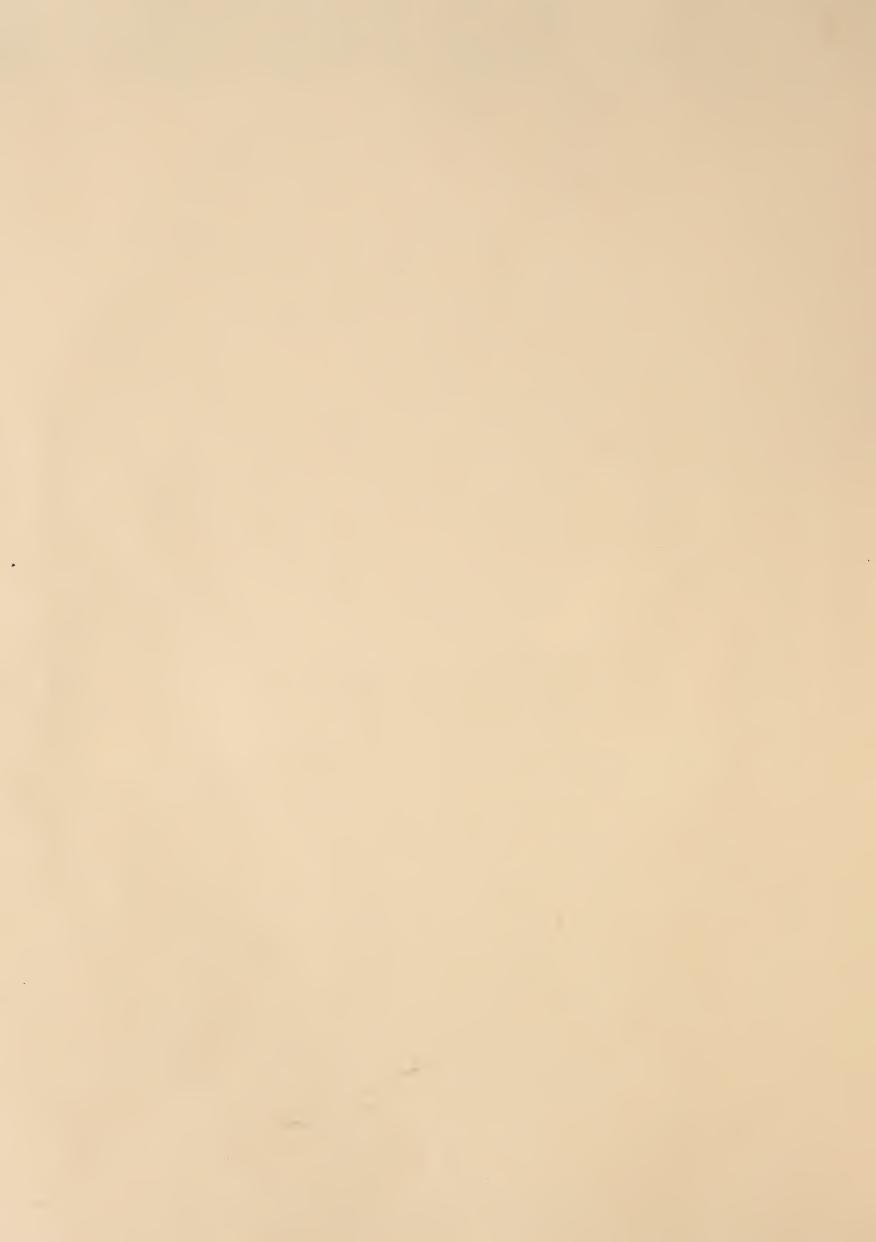
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Do not assume content reflects current scientific knowledge, policies, or practices.





# WATER SUPPLY OUTLOOK FOR OREGON

Prepared by

### U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
OREGON STATE UNIVERSITY
and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State and private organizations.

APR. 1, 1973

#### TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

#### PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

#### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

# WATER SUPPLY OUTLOOK FOR OREGON

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

APRIL 8, 1973

Issued by

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In Cooperation with

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STATE ENGINEER
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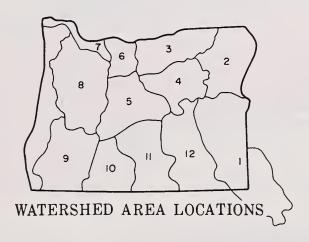
HOWARD M. VANCE, Assistant Snow Survey Supervisor

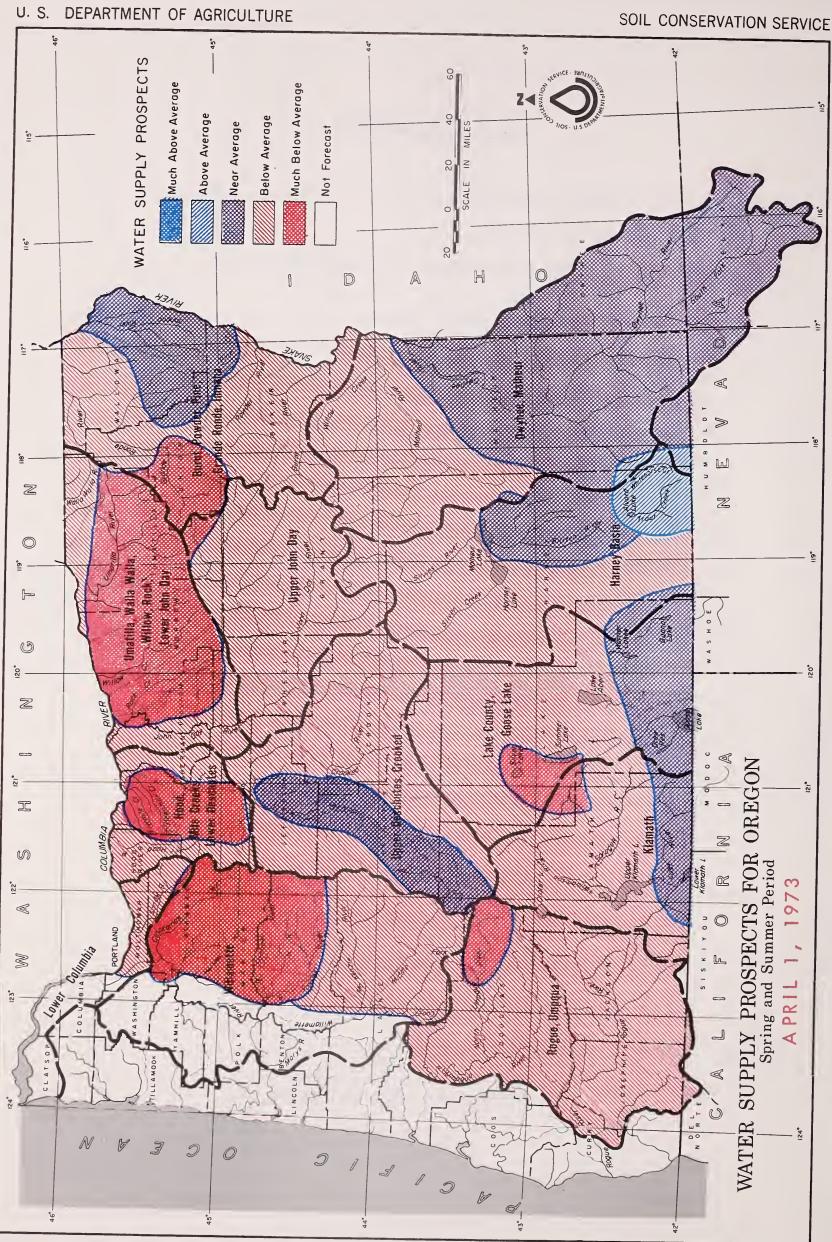
SOIL CONSERVATION SERVICE 1218 S W WASHINGTON ST PORTLAND, OREGON 97205



#### TABLE OF CONTENTS

		P A	A G E
WATER SUPPLY PROSPECTS FOR OREGON(MAP)	FACING	PAGE	1
WATER SUPPLY OUTLOOK FOR OREGON			. 1
DETAILED WATER SUPPLY OUTLOOK BY MAJOR WATERSHED ARI	EAS		
OWYHEE, MALHEUR		AREA	1
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA		AREA	2
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY	• • • • • •	AREA	3
UPPER JOHN DAY		AREA	4
Upper Deschutes, Crooked		AREA	5
Hood, Mile Creeks, Lower Deschutes		AREA	6
LOWER COLUMBIA		AREA	7
WILLAMETTE		AREA	8
ROGUE, UMPQUA		AREA	9
KLAMATH		AREA	10
LAKE COUNTY, GOOSE LAKE		AREA	11
HARNEY BASIN		AREA	12
BASIC DATA SUPPLEMENTS   SNOW			
II SOIL MOISTURE III PRECIPITATION			
MAP AND INDEX OF OREGON SNOW COURSES(MAP)			
LIST OF COOPERATORS	E DACK	COVE	





#### WATER SUPPLY OUTLOOK for OREGON

APRIL 1, 1973

Oregon water users will have average to much below average supplies this next summer. Reservoir storage is good and those with access will be able to adequately supply their needs. Users dependent on direct streamflow will experience shortages generally throughout the summer and especially during the late season. The mountain snow cover is the poorest since 1968, which was an extremely dry year, except on the Owyhee drainage where it is above normal. Streamflow will be much below average this coming summer.

#### SNOW COVER

The Owyhee basin, Trout Creek Range, and the Steens Mountains in South-eastern Oregon are the only areas of the state with above average snow cover. The snowpack in these areas varies from 130% on the Owyhee up to twice normal in the Trout Creek mountains. The rest of the state generally ranges from 25 to 65% of average in the Cascades, the Blue Mountains of Eastern Oregon and the John Day Basin. The snow cover is generally the worst since the dry year of 1968.

#### PRECIPITATION

Precipitation has been less than normal all winter in Oregon except for the extreme southeastern corner of the state which has been above average. It has been two-thirds to three-fourths normal for the November-March period. Rainfall during March was also less than usual with 20% of average amounts on the Hood River and Deschutes watersheds, ranging on up to 80% of normal in Western Oregon and the rest of the Cascades. Eastern Oregon had about half the normal rainfall for the month.

#### SOIL MOISTURE

Soils under the snowpack are somewhat drier than usual and this condition will detract from the snowmelt runoff.

#### RESERVOIR STORAGE

Most major irrigation reservoirs are storing more than average amounts of water for April 1. Some of the Willamette reservoirs, as well as Bully Creek, Warmsprings, McKay, Ochoco, and Drews in Eastern Oregon will

#### continued--

not fill. Users dependent on reservoir storage will have normal supplies through the irrigation season. Twenty-four major reservoirs are at 83% of capacity at this time. This is 118% of the 1953-67 average.

#### STREAMFLOW

Streamflow was 40 to 80% of average during March except on the Owyhee which was near normal. Streams will produce much below to below average amounts this coming summer. These will be the lowest amounts since 1968.

Representative forecasted streamflow for the April-September period is as follows:

STREAM	Percent 1953-67 Average
	115
Owyhee Net Inflow	115
Malheur near Drewsey	57
Deschutes at Benham Falls	88
Grande Ronde at La Grande	48
Willamette, Mid. Fk. near Oakridge	67
Klamath Lake net Inflow	64
Rogue near Raygold	73
Silvies near Burns	52
John Day, Mid. Fk. near Ritter	63

These forecasts assume average weather conditions from now until the end of September.

This report contains data furnished by the Oregon State Engineer, U. S. Geological Survey, NOAA National Weather Service, and other cooperators.





# WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS

**OREGON** 

*as of*APRIL 1, 1973

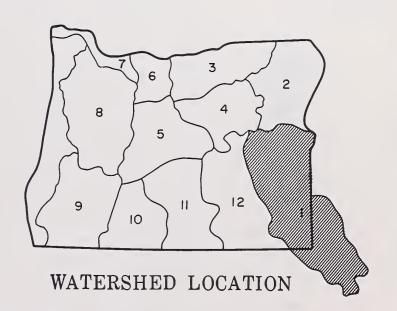
U. S. D. A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

WATER SUPPLIES WILL BE AVERAGE TO ABOVE AVERAGE IN THE SOUTHERN HALF OF MALHEUR COUNTY AND ON THE OWYHEE. THE NORTHERN HALF OF THE COUNTY WILL GENERALLY HAVE AVERAGE TO BELOW AVERAGE SUPPLIES. THE SNOW COVER IS 135% OF NORMAL ON THE OWYHEE BASIN, 85% ON JORDAN CREEK AND 75% ON THE MALHEUR. SOILS BENEATH THE SNOWPACK ARE DRIER THAN USUAL. THE PRECIPITATION FOR THE NOVEMBER-MARCH PERIOD HAS BEEN 95% OF AVERAGE. OWYHEE RESERVOIR IS NEARLY FULL. BULLY CREEK, WARMSPRINGS AND ANTELOPE WILL PROBABLY NOT FILL.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

Boulder Creek Bully Creek Cow Creek Jordan Creek Jordan Valley Irrig. Dist. McDermitt Creek Oregon Canyon Creek Owyhee Project Succor Creek Tenmile Creek Vale-Oregon Irrig. Dist. Warmsprings Irrig. Dist. Warmsprings Irrig. Dist. Warmsprings Irrig. Dist. Warmsprings Irrig. Dist. Willow Creek (Reservoired)  Average Spring Season  Average Fair Average Fair Average Average Average Fair Average		Flow Period				
Bully Creek Cow Creek Jordan Creek Jordan Valley Irrig. Dist. McDermitt Creek Oregon Canyon Creek Owyhee Project Succor Creek Tenmile Creek Vale-Oregon Irrig. Dist. Average Average Excellent Average Fair Average Excellent Average Fair Average Fair Average	STREAM or AREA					
	Boulder Creek Bully Creek Cow Creek Jordan Creek Jordan Valley Irrig. Dist. McDermitt Creek Oregon Canyon Creek Owyhee Project Succor Creek Tenmile Creek Vale-Oregon Irrig. Dist. Warmsprings Irrig. Dist.	Average Average Average Average Average Average Average Excellent Average Average Average Average Average Average	Fair Fair Fair Fair Fair Fair Fair Average Excellent Fair Fair Average Average Average			



T.A. GEORGE AND H.M. VANCE

U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

	THIS YEAR	PAST RECORD			
FORE	CAST	FORECAST	THOUSAND ACRE FEET		
Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average i	
10	77	Manak Man		11 4	
1				11.4	
				85 <sup>m</sup>	
	1			71 72	
				55	
				60	
			770	281	
	1			300	
340		April-Bept.	303	300	
	Thousand	FORECAST  Thousand Acre Feet Percent of Average  10 77 73 87 41 58 41 57 34 61 37 62 327 116	Thousand Acre Feet	Thousand Acre Feet	

#### FORECAST DATE of LOW FLOW VALUES

#### RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

				WESTKAOIK SLOWWOF (	Housand	AU. IL.	ENDOF	MONTH
FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value	RESERVOIR	Usable Capacity	This Year	sable Stora	
Owyhee near Rome	1000 250	June 20 July 4	May 24 June 20	Antelope Beulah Bully Creek Owyhee Warmsprings	70.0 60.0 30.0 715.0 191.0	b 42.6 19.6 702.6 123.8	41.9 55.2 25.7 695.6 166.4	19.1 41.5 17.4 476.8 117.3
				'	·			

#### SOIL MOISTURE

### SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN	Number of Stations	THIS YEAR'S	ENT OF:	RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEA WATER AS Last Year	AR'S SNOW PERCENT OF Average i
	Stations	Last Year	Average i	305-WATERSHED	, tveraged	Last fear	Average 1
Jordan Creek Malheur River Owyhee River	1 3 3	99 72 79	 81 70	Jordan Creek Malheur River Owyhee River	4 5 5	50 75 120	85 75 135

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.



# WATER SUPPLY OUTLOOK BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS OREGON

*as of* APRIL 1, 1973

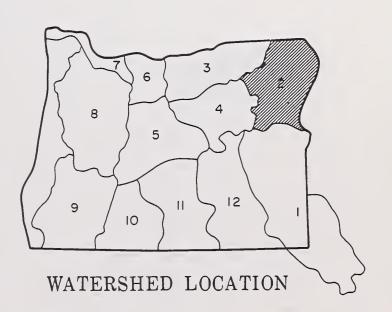
U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE ENGINEER

#### GENERAL OUTLOOK

WATER SUPPLIES WILL BE GENERALLY BELOW AVERAGE. MUCH BELOW AVERAGE SUPPLIES WILL BE AVAILABLE ON THE UPPER GRANDE RONDE. THE SNOW COVER VARIES FROM 65% ON THE BURNT DRAINAGE UP TO 80% OF NORMAL IN THE WALLOWA MOUNTAINS. THE UPPER GRANDE RONDE HAS A SNOW COVER ONLY THIRTY-FIVE PERCENT OF AVERAGE. SOILS BENEATH THE SNOWPACK ARE DRIER THAN USUAL IN ALL AREAS EXCEPT THE WALLOWAS WHERE CONDITIONS ARE NORMAL. RESERVOIR STORAGE IS ABOUT AVERAGE FOR THIS TIME OF YEAR. PRECIPITATION FOR THE NOVEMBER-MARCH PERIOD HAS BEEN ABOUT 70% OF NORMAL.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow F	Period
STREAM or AREA	Spring Season	Late Season
Alder Slope	Average	Average
Baker Valley	Average	Fair
Big Creek	Average	Fair
Clover Cr. (nr. N. Powder)	Fair	Fair
Cove	Average	Fair
Durkee	Average	Average
Eagle Valley	Average	Average
Elgin	Fair	Fair
Enterprise-Joseph	Average	Average
Hereford-Bridgeport	Average	Average
Imnaha River	Average	Average
LaGrande-Island City	Fair	Poor
Lostine-Wallowa	Average	Average
No. Powder River-Wolf Creek	Average	Fair
Pine Valley	Average	Average
Powder River-Elk Creek	Average	Fair
Summerville	Fair	Poor
Sumpter Valley	Average	Fair
Union-Hot Lake	Fair	Fair
Unity	Average	Fair



T.A. GEORGE AND H.M. VANCE

Bear near Wallowa   48   73   April-Sept.	PAST RECORD		
BASIN, STREAM and/or FORECAST POINT   Thousand Acre Feet   Percent of Average   Percent of	FEET		
Burnt near Hereford         17.2         51         April-July           Catherine near Union         44         69         April-Sept.           Eagle Creek above Skull Creek         160         96         April-July           Grande Ronde at La Grande         81         47         April-Sept.           Hurricane near Joseph         39         84         April-Sept.           Immaha at Imnaha         254         83         April-Sept.           Lostine near Lostine         95         82         April-Sept.           Powder near Sumpter         32         58         April-July           33         59         April-Sept.	Average $\overline{i}$		
Burnt near Hereford         17.2         51         April-July           Catherine near Union         44         69         April-Sept.           Eagle Creek above Skull Creek         160         96         April-July           Grande Ronde at La Grande         81         47         April-Sept.           Hurricane near Joseph         39         84         April-Sept.           Immaha at Imnaha         254         83         April-Sept.           Lostine near Lostine         95         82         April-Sept.           Powder near Sumpter         32         58         April-July           33         59         April-Sept.			
17.4   50   April-Sept.	66		
Catherine near Union       44       69       April-Sept.         Eagle Creek above Skull Creek       160       96       April-July         Grande Ronde at La Grande       81       47       April-Sept.         Hurricane near Joseph       39       84       April-Sept.         Imnaha at Imnaha       254       83       April-Sept.         Lostine near Lostine       95       82       April-Sept.         Powder near Sumpter       32       58       April-July         April-Sept.       35       59       April-Sept.	34		
Eagle Creek above Skull Creek       160       96       April-July         Grande Ronde at La Grande       81       47       April-July         Hurricane near Joseph       39       84       April-Sept.         Imnaha at Imnaha       254       83       April-Sept.         Lostine near Lostine       95       82       April-Sept.         Powder near Sumpter       32       58       April-July         April-Sept.       35       59       April-Sept.	35		
175   96   April-Sept.   81   47   April-July   84   48   April-Sept.   Hurricane near Joseph   39   84   April-Sept.   Imnaha at Imnaha   254   83   April-Sept.   Lostine near Lostine   95   82   April-Sept.   Powder near Sumpter   32   58   April-July   33   59   April-Sept.	64		
175	.68 <sup>m</sup>		
84   48   April-Sept.   39   84   April-Sept.   39   84   April-Sept.   39   84   April-Sept.   39   30   April-Sept.   30   April-Sept.   30   April-Sept.   30   April-Sept.   31   April-Sept.   32   April-July   33   59   April-Sept.   39   April-Sept.   30   April-Sept.   31   April-Sept.   32   April-Sept.   33   April-Sept.   34   April-Sept.   35   April-Sept.   36   April-Sept.   37   April-Sept.   38   April-Sept.   39   April-Sept.   30   April-Sept.   3	182 <sup>m</sup>		
Hurricane near Joseph   39   84   April-Sept.	72		
Hurricane near Joseph Imnaha at Imnaha 254 Lostine near Lostine Powder near Sumpter  39 84 April-Sept. April-Sept. 32 April-Sept. 32 April-July 33 59 April-Sept.	.75		
Immaha at Immaha25483April-Sept.Lostine near Lostine9582April-Sept.Powder near Sumpter3258April-July3359April-Sept.	47		
Lostine near Lostine Powder near Sumpter  95 82 April-Sept. April-July 33 59 April-Sept.	307		
Powder near Sumpter  32 58 April-July 33 59 April-Sept.	125		
33 59 April-Sept.	55		
	56		
	9.5		
12.6 105 April-Sept.	12.0		

#### RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

#### SUMMARY of SNOW MEASUREMENTS

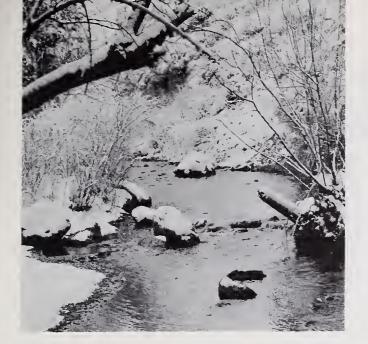
(COMPARISON WITH PREVIOUS YEARS)

ILSLITTUIN STUIMAL (THOUSAND NO. TC.) END OF MONTH				(COMPARISON WITH PREVIOUS	1 25 (11(0)			
RESERVOIR	Usable	able Usable Storage		RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF		
NESEN VOIN	Capacity	This Year	Last Year	Average i	SUB-WATERSHED	Averaged	Last Year	Average i
Phillips Lake Thief Valley Unity Wallowa Lake	73.5 17.4 25.2 37.5	50.1 17.4 16.7 15.1	67.2 17.4 20.0 20.6	 17.1 23.2	Burnt River Grande Ronde River above La Grande Powder River Wallowa, Imnaha, Catherine Creek	4 4 5 6	60 35 60 60	65 35 75 80

#### SOIL MOISTHRE

				SOIL MOISTURE				
				RIVER BASIN	Number of	THIS YEAR'S MOISTURE as PERCENT OF:		
:					Stations	Last Year	Average i	
				Burnt, Powder Grande Ronde, Catherine	2	57	82	
			-	Creek, Imnaha River	2	93	100	
		,					:	

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



# WATER SUPPLY OUTLOOK UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

as of

**OREGON** 

APRIL 1, 1973

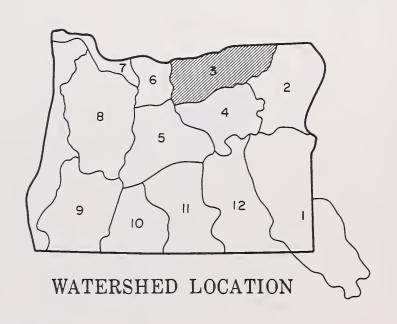
U. S. D. A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

WATER SUPPLIES WILL GENERALLY BE MUCH BELOW AVERAGE. USERS WITH ACCESS TO STORED SUPPLIES WILL EXPERIENCE BELOW AVERAGE CONDITIONS. RESERVOIR STORAGE IS ABOUT AVERAGE AT COLD SPRINGS AND HALF OF NORMAL AT McKAY. McKAY WILL NOT FILL. SOILS BENEATH THE SNOWPACK CONTAIN THE USUAL AMOUNT OF MOISTURE FOR APRIL 1. THE SNOW COVER IS 40 TO 55% OF NORMAL. THIS IS A RESULT OF THE DRY WINTER JUST EXPERIENCED WHERE PRECIPITATION WAS ONLY THREE-FOURTHS OF THE NORMAL.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow F	Period
STREAM or AREA	Spring Season	Late Season
Walla Walla River, Nor. Fork	Fair	Fair
Walla Walla River, So. Fork	Fair	Fair
Walla Walla River, Main	Fair	Fair
Walla Walla River, Little	Fair	Fair
Couse Creek	Fair	Fair
Dry Creek	Fair	Fair
Pine Creek	Fair	Fair
Umatilla River, Main	Fair	Poor
Wildhorse Creek	Fair	Poor
Umatilla R. (Cold Springs		
Reservoir)	Average	Fair
Umatilla R. (McKay Res.)	Average	Fair
McKay Creek	Fair	Fair
Birch Creek	Fair	Fair
Butter Creek	Fair	Fair
Willow Creek	Fair	Fair
Rhea Creek	Fair	Fair
Rock Creek (John Day		
Tributary)	Fair	Fair



U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS		THIS YEA	PAST RECORD THOUSAND ACRE FEET		
	FORE	FORECAST			
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average i
Birch Creek at Rieth	11.0	60	April-July		18.4
Butter Creek near Pine City	5.1	60	April-July		8.6
McKay near Pilot Rock	16.8	60	April-Sept.		28
Umatilla near Gibbon	37	50	April-July		74
	40	50	April-Sept.		80
Umatilla at Pendleton	90	60	April-July		150
	93	60	April-Sept.		155
Walla Walla, South Fork near Milton	42	78	April-July		54
	54	80	April-Sept.		67

#### FORECAST DATE of LOW FLOW VALUES

RESERVOIR	STORAGE	(Thousand	Ac.	Ft.)	END OF MONTH
MEDENAOIN	JIUNAUL	<b>Villousallu</b>	nu.	1 4./	END OF MONTH

	KEZEKANIK ZINKURE (1	iivu3aiiu	MU. 11.	END OF	MONTH			
FORECAST POINT	Low Flow Value	Forecast Date Stream Will Recede to Low	Average Date of Low Flow	RESERVOIR	Usable		sable Stora	ge
	Second/Ft.	Recede to Low Flow Value	Value		Capacity	This Year	Last Year	Average i
Umatilla at Pendleton	550	May 4	May 22	Cold Springs McKay	50.0 73.8	47.2 28.0	43.4 63.9	48.8

#### SOIL MOISTURE

### SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

				(COMPARISON WITH PREVIOUS YEARS)					
RIVER BASIN	Number of	as PERC	THIS YEAR'S MOISTURE RIVEI as PERCENT OF:		Number of Courses	WATER AS	AR'S SNOW PERCENT OF		
	Stations	Last Year	Average i	SUB-WATERSHED	Averaged	Last Year	Average i		
Umatilla, Walla Walla, McKay Creek	2	100	94	McKay Creek Umatilla River	3 3	35 35	40 45		
McKay Creek	2	100	94	Walla Walla River	2	40	55		
		_							
			•						
			,						

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



# WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

as of

APRIL 1, 1973

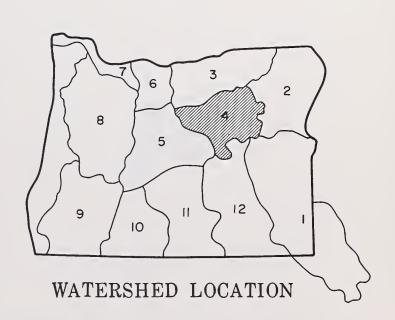
U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

WATER SUPPLIES WILL GENERALLY BE MUCH BELOW AVERAGE IN THE JOHN DAY BASIN. THE SNOW COVER IS 60 TO 75% OF AVERAGE. SOILS BENEATH THE SNOWPACK ARE DRIER THAN USUAL. PRECIPITATION FOR THE NOVEMBER-MARCH PERIOD WAS ONLY 70% OF NORMAL. AS A RESULT OF THESE CONDITIONS STREAMFLOW WILL BE 60 TO 75% OF AVERAGE THIS SPRING AND SUMMER.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow F	Period
STREAM or AREA	Spring Season	Late Season
Beech Creek Beech Creek-Fox-Long Cr. Bridge-Mountain Creeks Camas Creek Cherry Creek Indian-Pine Creeks John Day River, Main Fork John Day River, Mid. Fork John Day River, N. Fork John Day River, So. Fork Monument-Kimberly Strawberry Creek	Spring	Late



T.A. GEDRGE AND H.M. VANCE

U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST.
PORTLAND, DREGDN 972DS

STREAMFLOW FORECASTS		THIS YEAR	R	PAST RECORD THOUSAND ACRE FEET		
	FOR	CAST	FORECAST			
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average	
Camas Creek near Ukiah	26	69	April-July		38	
John Day at Prairie City	26 29	68 69	April-Sept. April-July		39 42	
John Day, Middle Fork at Ritter	33 70	72 63	April-Sept. April-July		46 112	
John Day, North Fork at Monument	73 330 343	63 58 59	April-Sept. April-July		116 568	
Strawberry near Prairie City	5.9	77	April-Sept. April-July April-Sept.		583 7.7 8.4	
	0.2	/3	April-Sept.		0.4	

#### SOIL MOISTURE

### SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

THIS YEAR'S SNOW WATER AS PERCENT OF

THIS YEAR'S MOISTURE as PERCENT OF: RIVER BASIN Number of RIVER BASIN Courses

	Stations	Last Year	Average i	SUB-WATERSHED	Averaged	Last Year	Average i
John Day abv. Dayville John Day, North Fork	2 2	69 79	83 95	John Day, North Fork John Day abv. Dayville	7 5	55 75	60 - 75
			-				
		-					

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67. 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



### WATER SUPPLY OUTLOOK UPPER DESCHUTES, CROOKED WATERSHEDS

**OREGON** 

as of APRIL 1, 1973

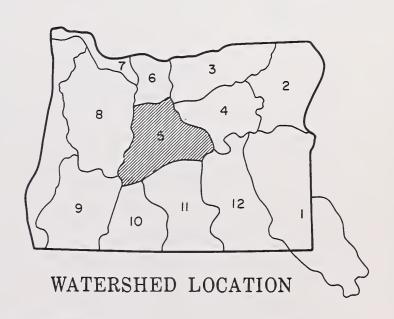
U. S. D. A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

#### GENERAL OUTLOOK

WATER SUPPLIES GENERALLY WILL BE CLOSE TO AVERAGE. ALTHOUGH THE SNOW COVER IS MUCH BELOW NORMAL, RESERVOIRS ARE FULL OR NEARLY FULL WITH THE EXCEPTION OF OCHOCO. USERS DEPENDENT ON DIRECT STREAMFLOW WILL HAVE MUCH BELOW AVERAGE SUPPLIES. PRECIPITATION FOR THE WINTER PERIOD NOVEMBER-MARCH HAS BEEN 75% OF NORMAL. SOILS BENEATH THE SNOWPACK ARE DRIER THAN USUAL.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow Period				
	Flow F	eriod			
STREAM or AREA	Spring	Late			
	Season	Season			
Arnold Irrigation Dist. Bear Creek Beaver Creek Camp Creek Central Ore. Irrig. Dist. Crooked River Deschutes River Hay-Trout Creek Lone Pine Irrig. Dist. Mill Creek North Unit Irrig. Dist. Ochoco Creek Sisters Irrigation Dist. Snow Creek Irrig. Dist. Squaw Creek Irrigation Dist. Swalley Ditch Tumalo Project Walker Basin Irrig. Dist.	Excellent Average Average Average Fair Average Fair Average Average Fair Average Average Fair Average Excellent Average Excellent Average Excellent	Average Fair Fair Average Fair Average Fair Average Fair Average Fair Fair Fair Fair Fair Fair Excellent Fair Average			



Report prepared by -

T.A. GEORGE AND H.M. VANCE

U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS		THIS YEAR	PAST RECORD			
	FORECAST			THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	FORECAST PERIOD	Last Year	Average i	
Beaver Creek near Paulina	15.0	72	April-July		20	
DOUVOI GIGON HOUI I GUILLIU	15.0	72	April-Sept.	-	20	
Crane Prairie Reservoir Total Inflow	60	73	April-July		83	
	91	72	April-Sept.		126	
Crescent at Crescent Lake	16	72	April-July		22	
	20	72	April-Sept.		28	
Crooked near Post	74	75	April-July		99	
,	76 .	75	April-Sept.		101	
Deschutes at Benham Falls <sup>d</sup>	333	85	April-July		393	
	526	88	April-Sept.		596	
Deschutes below Snow Creek	52	79	April-Sept.		66	
Deschutes, Little near LaPine <sup>d</sup>	48	58	Apri1-July		83	
	51	53	April-Sept.		95	
Ochoco Reservoir net Inflow	12.0	50	April-Sept.		23	
Odell near Crescent	22	75	April-Sept.		30	
Squaw near Sisters	39	77	April-Sept.		51	
Tumalo near Bend $d$	37	76	April-Sept.		49	

#### FORECAST DATE of LOW FLOW VALUES

#### RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

				MESERTOIR STORAGE (				
FORECAST POINT	Low Flow Value	Stream will	Average Date of Low Flow	RESERVOIR	Usable		sable Stora	ge
	Second/Ft.	Recede to Low Flow Value	Value	·	Capacity	This Year	Last Year	Average i
Crane Prairie net Inflow Crooked R. near Post Deschutes at Bend Little Deschutes near La Pine  *Will not reach this level.	300 100 1500 400 200	* May 20 Sept. 9  * May 28	July 15 June 1 July 1 June 7 July 8	Crane Prairie Crescent Lake Ochoco Prineville Wickiup	55.3 86.9 47.5 153.0 200.0	55.9 87.5 28.3 131.3 200.3	59.2 83.2 46.3 137.0 196.4	47.6 49.9 33.2 115.8 194.4

#### SOIL MOISTURE

#### SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN	Number of Stations	as PERCENT OF:		RIVER BASIN and/or	Number of Courses	THIS YEA	R'S SNOW PERCENT OF
	Stations	Last Year	Average i	SUB-WATERSHED	Averaged	Last Year	Average i
Crooked R., Upper Deschutes River	2	76		Crooked, Ochoco Deschutes abv. Wickiup Little Deschutes Tumalo & Squaw Crs.	4 3 4 3	75 45 50 40	75 65 60 55

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



# WATER SUPPLY OUTLOOK HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

**OREGON** 

as of

APRIL 1, 1973

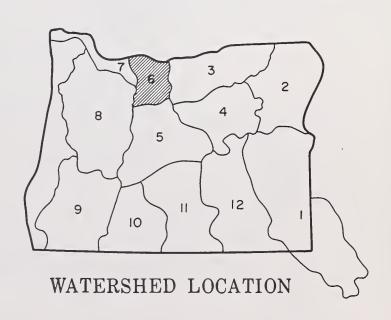
U. S. D. A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

#### GENERAL OUTLOOK

WATER SUPPLIES WILL BE MUCH BELOW AVERAGE. THE SNOW COVER IS VERY POOR, ONLY 25 TO 45% OF NORMAL. IT IS ALMOST AS LOW AS 1968 WHICH WAS ONE OF THE LOWEST ON RECORD. PRECIPITATION FOR THE WINTER PERIOD NOVEMBER THROUGH MARCH HAS ONLY BEEN 60% OF AVERAGE. SOILS BENEATH THE SNOWPACK CONTAIN THE USUAL AMOUNT OF MOISTURE AND THIS CONDITION SHOULD NOT DETRACT FROM THE RUNOFF. STREAMFLOW WILL BE MUCH BELOW NORMAL, ESPECIALLY DURING THE LATE SEASON.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow P	erìod
STREAM or AREA	Spring Season	Late Season
41 1 1 1 - Did il (T (		r-:
Aldridge Ditch (Tony Creek)	Average	Fair
Badger Creek	Fair	Poor
Dee Irrigation Dist.	Average	Fair
East Fork Irrig. Dist.	Average	Fair
Farmers Irrigation Dist.	Average	Fair Fair
Hood River Irrig. Dist.	Average	Fair
Juniper Flat	Average	Fair
Middle Fork Irrig. Dist.	Average	
Mile Creeks	Fair	Poor
Mill Creek	Fair	Poor
Mount Hood Irrig. Dist.	Average	Fair
Rock-Gate-Threemile Crs.	Fair	Poor
Tygh Creek	Fair	Poor
White River	Average	Fair
	ł	



T.A. GEORGE AND H.M. VANCE

STREAMFLOW FORECASTS		THIS YEAR	3	PAST R	ECORD
	FORE	CAST	FORECAST	THOUSAND ACRE FEET	
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average i
Hood River near Tucker Bridge	185 228	65 68	April-July April-Sept.		282 336
Hood, West Fork near Dee	97 112	69 70	April-July April-Sept.	,	140 161
White below Tygh Valley	58 72	45 50	April-July April-Sept.		128 144
	,		_		

FORECAST DATE of LOW FLOW VALUES

DECEDVAID CTADAGE (Thousand Ac Ft )

IUNECASI DAIL UI LUW	ILUW VAL	UL3		KEZEKANIK ZINKARE (1	nousanu	AU. FL.	END OF	MONTH
FORECAST POINT	Low Flow Value	Forecast Date Stream Will	Average Date of Low Flow	RESERVOIR	Usable	U	sable Stora	ge
TORECAST TORT	Second/Ft.	Recede to Low Flow Value	Value	RESERVOIR	Capacity	This Year	Last Year	Average i
Clear Branch Inflow	*28	July 15-31	**39	Clear Lake (Wasco)	11.9	7.2	10.6	4.0
*Average cfs forecast to flow for this two-week period.								
**Average cfs for period of record.								

#### SOIL MOISTURE

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN	Number of	THIS YEAR' as PER	S MOISTURE CENT OF:	RIVER BASIN and/or	Number of Courses	THIS YE. WATER AS	AR'S SNOW PERCENT OF
	Stations	Last Year	Average i	SUB-WATERSHED	Averaged	Last Year	Average i
Hood River, Mile Creeks	1	100		Hood River Mile Creeks White River	6 3 3	35 55 30	45 25 45

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



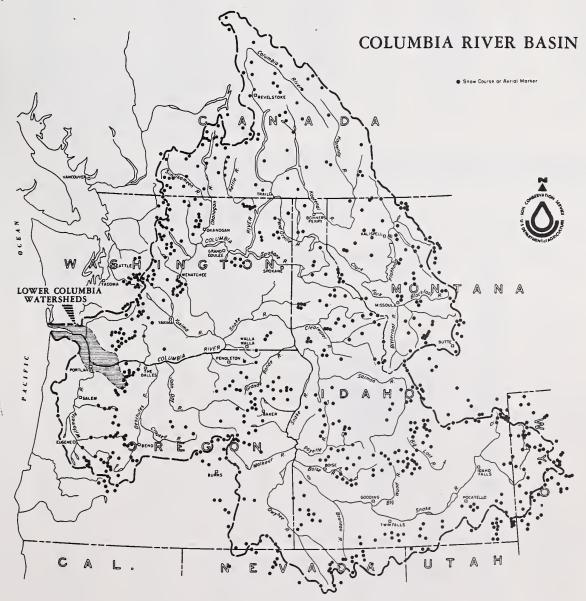
### WATER SUPPLY OUTLOOK LOWER COLUMBIA WATERSHEDS **OREGON**

as of APRIL 1, 1973

U. S. D. A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

#### GENERAL OUTLOOK

SNOW COVER OVER MOST OF THE COLUMBIA BASIN RANGES BETWEEN ABOUT FORTY TO NINETY PERCENT OF NORMAL. ON MOST SOUTHERN TRIBUTARIES TO THE SNAKE RIVER IN SOUTHERN IDAHO IT IS HIGHER, VARYING FROM ABOUT NORMAL TO ONE-THIRD ABOVE NORMAL. STORAGE IN IRRIGATION RESERVOIRS IS MORE THAN USUAL BUT IS DOWN IN POWER RESERVOIRS. SOME OF THESE ARE NOT EXPECTED TO FILL. FLOW OF THE COLUMBIA RIVER AT THE DALLES IS STILL EXPECTED TO BE ABOUT THREE-FOURTHS OF THE USUAL AMOUNT.



Report prepared by -U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE 1218 S.W. WASHINGTON ST. PORTLAND, OREGON 97205

### SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

Committee of the control of the cont	,		
RIVER BASIN and/or	Number of Courses		AR'S SNOW PERCENT OF
SUB-WATERSHED	Averaged	Last Year	Average ][1]
Sandy River	2	30	50

STREAMFLOW FORECASTS		THIS YEA	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND A	CRE FEET
BASIN, STREAM and/or FORECAST POINT  Thousand Acre Feet Average		PERIOD	Last Year	Average ¿	
Columbia at The Dalles $d$	54,100 82,800	75 79	April-June April-Sept.	96,290 134,620	72,406 105,176
Sandy River near Marmot	251 289	70 70	April-July April-Sept.	201,020	359 413

#### HISTORICAL DATA (Columbia River at The Dalles)

		TREAMFLOW <sup>d</sup> (1,000 A.F.)		PEAK e	
YEAR	APR.— SEPT.	APR. — JUNE	MAY JUNE	(1,000 c.f.s )	DATE
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June ,6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,408	65,112	622	June 10
1953-67 Avg.	105,181	72,408	59,689	574	

#### LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

				DRAINA	GE DISTRICT PUM	PHOUSE		
VANCOUVER	FLOW AT	SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSO
GAGE	THE DALLES				RIVER MILES			
(Weather Bu.)	(1,000 c.f.s )	118,9	96.0	91.0	77. 0	62.0	52.0	47. 0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.



# WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

**as of**APRIL 1, 1973

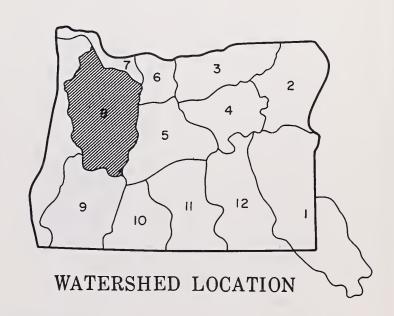
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

#### GENERAL OUTLOOK

WATER SUPPLIES WILL BE MUCH BELOW NORMAL. THE SNOW COVER IN THE CASCADES IS THE LOWEST SINCE 1968. IT IS 25 TO 30% OF AVERAGE ON THE CLACKAMAS AND SANTIAM DRAINAGES, AND NEAR 50% ON THE McKENZIE AND UPPER WILLAMETTE. SOME OF THE WILLAMETTE RESERVOIRS WILL NOT FILL AS STREAMS WILL PRODUCE MUCH BELOW AVERAGE AMOUNTS DURING THE RUNOFF SEASON. PRECIPITATION FOR THE NOVEMBER-MARCH WINTER PERIOD HAS ONLY BEEN 70% OF NORMAL.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow F	Period
STREAM or AREA	Spring Season	Late Season
G-1		
Calapooya	Fair	Poor
Clackamas McKenzie	Fair Fair	Poor Fair
Molalla	Fair	Poor
Santiam, North	Fair	Poor
Santiam, South	Fair	Poor
Willamette, Coast Fork	Fair	Fair
Willamette, Middle Fork	Fair	Fair



T.A. GEORGE AND H.M. VANCE

U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST. PORTLAND, OREGON 9720S

STREAMFLOW FORECASTS		THIS YEAR	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND A	CRE FEET
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average 'i
Clackamas at Estacada	480	70	April-July		689
	550	69	April-Sept.		800
Clackamas above Three Lynx	335	65	April-July		517
	422	63	April-Sept.		610
McKenzie at McKenzie Bridge	339	72	April-July		465
·	460	75	April-Sept.		614
McKenzie near Vida	771	71	April-July		1087
	971	.73	April-Sept.		1321
McKenzie, South Fork near Rainbow	150	68	April-July		221
	177	70	April-Sept.	-	252
Oak Grove Fork above Power Intake	88	71	April-July		125
	128	78	April-Sept.		163
Row near Dorena	69	65	April-July		106
	73	66	April-Sept.		110
Santiam, North at Mehama $^d$	504	63	April-July		800
	526	64	April-Sept.		901
Santiam, South at Waterloo	375	63	April-July		596
·	405	64	April-Sept.		633
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge d	471	65	April-July		725
	554	67	April-Sept.		828
Willamette, No. Fk. of Mid. Fk. near Oakridge	128	65	April-July		198
	146	67	April-Sept.		219
Willamette at Salem <i>d</i>	2999	64	April-July		4696
	3496	67	April-Sept.		5199

### SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RESERVOIR STORAGE (Thousand Ac. F	t.)	END OF MONTH
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(COMPARISON WITH PREVIOUS YE	, (1(3)			MESERADIN SIGNAGE (1	nougana ,	10. 11.7		
RIVER BASIN and/or	Number of Courses	THIS YE WATER AS	AR'S SNOW PERCENT OF	RESERVOIR	Usable		sable Stora	ge
SUB-WATERSHED	Averaged	Last Year	Average i	KESEKYOTK	Capacity	This Year	Last Ýear	Average i
Clackamas River McKenzie River Row River Santiam River Willamette, Mid. Fk.	2 3 2 4 5	25 35 55 20 40	25 50 55 30 55	Blue River Cottage Grove Cougar Detroit Dorena Fall Creek Fern Ridge Foster Green Peter Hills Creek Lookout Point Timothy Lake  *Multiple purpose reservoirspace reserved primarily for flood runoff.	85.6* 30.0* 155.2* 299.9* 70.5* 115.0* 94.2* 30.0* 270.0* 201.7	45.4 21.6 56.9 110.7 50.7 63.4 68.2 16.7 150.8 85.1 65.8 55.5	54.4 17.0 96.2 196.6 39.3 78.2 87.0 10.5 173.3 137.9 237.6 59.5	17.2  170.1 .38.6  68.8  120.3 195.6 49.4

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



# WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

as of

APRIL 1, 1973

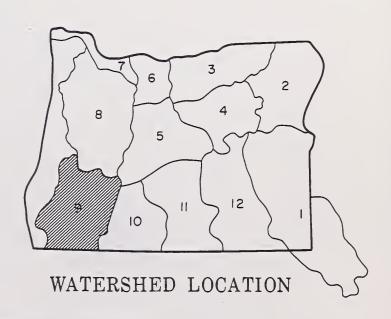
U. S. D. A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

#### GENERAL OUTLOOK

WATER SUPPLIES WILL BE BELOW NORMAL THIS COMING SPRING AND SUMMER. THE MOUNTAIN SNOWPACK IS 65 TO 75% OF AVERAGE EXCEPT ON THE NORTH UMPQUA WHERE IT IS ONLY 45% OF NORMAL. PRECIPITATION DURING THE NOVEMBER-MARCH WINTER PERIOD HAS BEEN 66% OF AVERAGE. RESERVOIR STORAGE IS NEARLY NORMAL FOR THIS TIME OF YEAR AND WILL PROVIDE GOOD SUPPLIES TO USERS WITH ACCESS. STREAMFLOW WILL BE DEFICIENT BECAUSE OF THE POOR SNOWPACK.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

Flow Period			
ng Late on Season			
ige Fair			
ige Fair			
age Fair			
age Fair			
age Fair			
ige Fair			
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Report prepared by \_\_\_\_\_\_\_ T.A. GEORGE AND H.M. VANCE

U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST. PORTLAND, OREGON 97205

		THIS YEA	PAST RECORD			
	FORE	CAST	FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average i	
Average of the second s						
Applegate near Copper	86	61	April-Sept.		140	
Clearwater above Trap Creek <sup>d</sup>	73	100	April-Sept.		73	
Fourmile Lake net Inflow	3.6	90	April-Sept.		4.1	
Hyatt Reservoir net Inflowd	2.5	50	April-July		5.2	
Illinois River near Kerby	184	90	April-July		205	
	190	90	April-Sept.		211	
Little Butte, N. Fk. at Fish Lk. nr. Lake $\operatorname{Cr}^a$	9.0	63	April-Sept.		14.4	
Little Butte, So. Fk. near Lake Creek	26	74	April-July		33	
Rogue above Prospect	193	72	April-July		269	
	239	73	April-Sept.		326	
Rogue, South Fork near Prospectd	48	77	April-July		62	
	55	75	April-Sept.		74	
Rogue at Raygold near Central Point	564	72	April-July		781	
•	687	73	April-Sept.		941	
Rogue at Grants Pass	736	78	April-Sept.		940	
	132	75	April-Sept.		176	

#### FORECAST DATE of LOW FLOW VALUES

CTDEAMELOW FOREOUT

#### RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

Low Flow Forecast Date Stream Will Of Low Flow RESERVOIR		Usable	·	Jsable Stor	age		
Second/Ft.	Recede to Low Flow Value	Value	RESERVOIR	Capacity	This Year	Last Year	Average i
100 1200 *1220 * 950	May 1 July 8 July 1 Aug. 15	May 27 Aug. 7	Emigrant Lake Fish Lake Fourmile Lake Howard Prairie Hyatt Prairie	39.0 8.0 16.1 60.0 16.1	31.4 7.6 b 44.0 10.2	38.8 8.0 14.4 60.6 15.5	35.0* 6.0 10.6 32.7 11.9
					ENTS		
			RIVER BASIN and/or SUB-WATERSHED	Cour	ses N	ATER AS F	R'S SNOW PERCENT OF Average i
			Applegate Bear Creek Butte Creek Illinois River North Umpqua Rogue River	3 2 4 3 3 6		80 80 85 140 40 50	65 65 75 65 45 70
	Value Second/Ft. 100 1200 *1220	Value Second/Ft.  Stream Will Recede to Low Flow Value  100 May 1 1200 July 8 *1220 July 1	Stream Will Recede to Low Flow Value of Low Flow Value  100 May 1 May 27 1200 July 8 Aug. 7 *1220 July 1	Value Second/Ft.    Stream Will Recede to Low Flow Value   Stream Will Recede to Low Flow Value	Summary of Snow Measurem Will Recede to Low Flow Value    100	Stream Will Recede to Low Flow Value    100	Comparison with Previous Years of record (in base period) after reconstruction.   Summary of Snow Measurements   Comparison of the construction   Summary of Snow Measurements   Comparison of the construction   Comparison of the c

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



# WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

as of

APRIL 1, 1973

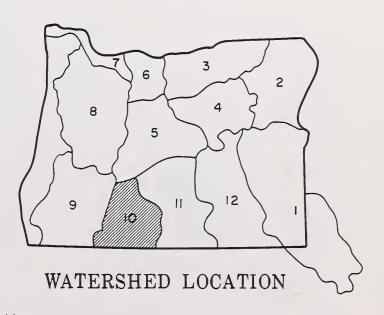
U. S. D. A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

#### GENERAL OUTLOOK

WATER SUPPLIES WILL BE AVERAGE TO BELOW AVERAGE. THE MOUNTAIN SNOW-PACK IS ABOUT HALF OF NORMAL EXCEPT FOR THE AREAS OF CALIFORNIA THAT DRAIN INTO OREGON ON THE UPPER LOST RIVER WHERE THE SNOW COVER IS ABOUT AVERAGE. RESERVOIR STORAGE IS EXCELLENT FOR THIS TIME OF YEAR, AND USERS WITH ACCESS WILL HAVE ADEQUATE SUPPLIES. STREAMFLOW WILL BE MUCH BELOW NORMAL IN MOST OF KLAMATH COUNTY, HOWEVER, AND WATER USERS DEPENDENT UPON DIRECT DIVERSION WILL EXPERIENCE SHORTAGES. PRECIPITATION THIS PAST WINTER WAS 77% OF NORMAL.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow Period				
STREAM or AREA	Spring Season	Late Season			
Ft. Klamath Valley Lost River (Clear Lake) Lost River (Gerber) Lost River (Willow Res.) Sprague River Upper Klamath Lake Williamson River	Fair Average Average Average Fair Average Fair	Fair Average Average Average Poor Average Poor			
	•				



Report prepared by

T.A. GEORGE AND H.M. VANCE

U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

STREAMFLOW FORECASTS		THIS YEAR	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET	
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average $i$
Clear Lake Reservoir Inflow k	36	96	April-July	-	38
	38	96	April-Sept.		40
Gerber Reservoir Inflow k	13.3	70	April-July		19.1
	14.6	75	April-Sept.		19.5
Sprague near Chiloquin	133	50	April-July		263
	162	55	April-Sept.		296
Upper Klamath Lake net Inflow <sup>k</sup>	273	54	April-July		511
	400	64	April-Sept.		619
Williamson below Sprague River	281	59	April-Sept.		475

THIS YEAR'S MOISTURE as PERCENT OF:

Number

#### SOIL MOISTURE

RESERVOIR	STORAGE	(Thousand	Ac.	Ft.)	END OF MONTH
-----------	---------	-----------	-----	------	--------------

Usable Storage

RIVER BASIN	Number	as PERCENT OF:		RESERVOIR	Usable	ι	Isable Stora	age
	Stations	Last Year	Average i	RESERVOIR	Capacity	This Year	Last Year	Average 1
Upper Klamath	1	71	83	Clear Lake Gerber Upper Klamath Lake	440.2 94.0 584.0	323.0 68.6 495.2	410.9 93.0 487.3	
				SUMMARY OF SNOW ME (COMPARISON WITH PREVIOUS RIVER BASIN	Number	of	THIS YEAR	'S SNOW
				and/or SUB-WATERSHED	Course Average		t Year	Average i
				Lost River Sprague River Upper Klamath Williamson River	3 3 8 3		110 95 70 60	115 65 60 50

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



# WATER SUPPLY OUTLOOK LAKE COUNTY, GOOSE LAKE WATERSHEDS OREGON

as of

APRIL 1, 1973

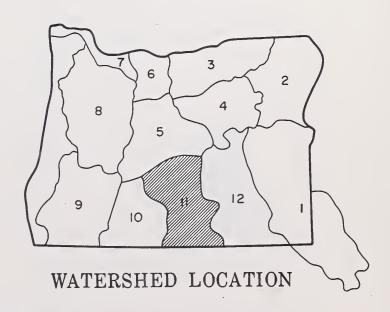
U.S.D.A. SOIL CONSERVATION SERVICE OREGON STATE ENGINEER

#### GENERAL OUTLOOK

WATER SUPPLIES WILL BE AVERAGE TO BELOW AVERAGE THIS SUMMER. THE SNOW COVER IS NEAR NORMAL IN MOST OF THE COUNTY EXCEPT ALONG THE WINTER RIM AND ON NORTH TO SILVER LAKE WHERE IT IS VERY POOR. PRE-CIPITATION THIS PAST WINTER WAS ONLY 70% OF NORMAL. SOILS BENEATH THE SNOWPACK ARE DRIER THAN USUAL EXCEPT FOR THE WARNER MOUNTAINS WHERE THE CONDITION IS NEAR AVERAGE. STREAMFLOW THIS SUMMER WILL BE CLOSE TO NORMAL WHERE THE SNOW COVER IS GOOD AND DEFICIENT ELSEWHERE.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow Period			
STREAM or AREA	Spring Season	Late Season		
Chewaucan River	Fair	Poor		
Crooked Creek	Fair	Fair		
Deep Creek	Average	Average		
Dry Creek	Fair	Fair		
East Side Goose Lake	Fair	Fair		
Guano Lake	Average	Fair		
Honey Creek	Average	Fair		
Lakeview Water Users Assn.	Average	Average		
Rock Creek (Hart Mountain)	Fair	Fair		
Silver-Buck Creeks	Poor	Poor		
Summer Lake	Fair	Poor		
Thomas Creek	Fair	Fair		
Twentymile Creek	Average	Average		
Warner Lakes	Average	Average		
	1			
	1			
*				



T.A. GEORGE AND H.M. VANCE

U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST. PORTLAND, OREGON 97205

STREAMFLOW FORECASTS		THIS YEA	PAST RECORD THOUSAND ACRE FEET		
	FORE	FORECAST			
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	FORECAST PERIOD	Last Year	Average
Chewaucan near Paisley	47	(0)	A		
Grewadean hear raisiey	50	60 59	April-July		79
Deep above Ade1	64	99	April-Sept. April-July		84 64
200p 43000 Na02	66	101	April-Saly April-Sept.		65
Drews Reservoir Inflow	21	69	April-July		30
Honey near Plush	11.3	71	April-July		15.9
	12.3	77	April-Sept.	:	16.1
Silver Creek near Silver Lake	9.3	50	April-July	i	18.6
	10.0	- 50	April-Sept.		20
Twentymile near Adel	18.8	112	April-July		16.8
	20.3	118	April-Sept.		17.2
•					

#### SOIL MOISTURE

RESERVOIR	STORAGE	(Thousand	Ac.	Ft.)	END OF MONTH
-----------	---------	-----------	-----	------	--------------

RIVER BASIN	Number	THIS YEAR'	S MOISTURE	DESERVOIR STORAGE (	Usable		Usable Sto	
KIAFIK BUSHA	Stations	Last Year	Average i			This Year	Last Year	Average i
Chewaucan, Silver Creek, Drew Creek Honey, Deep, 20-Mi. Cr.	1 1	71 98	83 103	Cottonwood Drews  *Average for years of record (in base period) after reconstruction.	8.7 63.0	3.4 49.3	6.5 63.0	4.4*
				SUMMARY OF SNOW ME (COMPARISON WITH PREVIOUS  RIVER BASIN and/or SUB-WATERSHED		er of ses		R'S SNOW PERCENT OF Average i
				Chewaucan River Deep Creek Drew Creek Honey Creek Silver Creek Twentymile Creek	3 3 3 3 3 3		95 100 930 100 95 120	70 105 90 90 15 110

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



# WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS OREGON

as of

APRIL 1, 1973

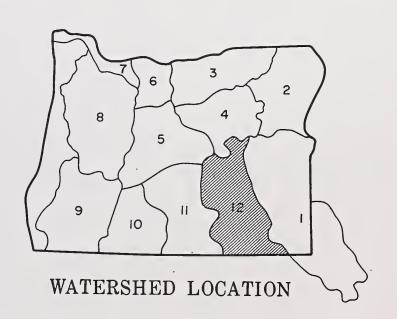
U. S. D. A. SOIL CONSERVATION SERVICE OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

#### GENERAL OUTLOOK

WATER SUPPLIES WILL BE MUCH ABOVE AVERAGE IN THE TROUT CREEK AREA, AVERAGE IN THE STEENS, AND BELOW AVERAGE IN THE NORTH PART OF HARNEY COUNTY. THE SNOW COVER IS ABOUT TWICE THE NORMAL AMOUNT IN THE TROUT CREEK WATERSHED. THE STEENS MOUNTAIN SNOWPACK IS A LITTLE ABOVE AVERAGE. THE SNOW COVER ELSEWHERE IS BELOW NORMAL. STREAMFLOW THIS NEXT SUMMER WILL GENERALLY FOLLOW THIS PATTERN. PRECIPITATION THIS PAST WINTER WAS 75% OF NORMAL.

#### WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

	Flow Pe	eriod
STREAM or AREA	Spring Season	Late Season
Catlow Valley	Average	Fair
Cow Creek	Fair	Fair
Donner und Blitzen River	Average	Average
Mill-Coffeepot Creeks	Fair	Fair
Rattlesnake Creek	Fair	Fair
Silver Creek	Fair	Fair
Silvies River	Fair	Fair
Soldier-Prather Creek	Fair	Fair
Trout Creek	Excellent	Average
Whitehorse Creek	Excellent	Average
-		



Report prepared by

T.A. GEORGE AND H.M. VANCE

U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 9720S

STREAMFLOW FORECASTS		THIS YEAR	PAST RECORD		
	FORE	FORECAST		THOUSAND ACRE FEET	
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	FORECAST PERIOD	Last Year	Average i
Donner und Blitzen near Frenchglen	55	111	April-July		51
	60	109	April-Sept.		55
Silver near Riley Silvies near Burns	9.0	50 49	April-July April-July		17.9 81
STIVIES HEAR BURNS	43	52	April-Sury April-Sept.		83
Trout near Denio	10.2	144	April-July		7.1
	10.6	142	April-Sept.		7.5
1					
	•				
·					
	. ,				

#### SOIL MOISTURE

#### SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS) THIS YEAR'S MOISTURE as PERCENT OF: THIS YEAR'S SNOW WATER AS PERÇENT OF Number RIVER BASIN Number of Courses Averaged RIVER BASIN of Stations and/or SUB-WATERSHED Last Year Last Year Average i Silvies River, Silver Cr. 2 73 84 Donner und Blitzen R. 85 125 Trout Cr., Donner und Blitzen River Silver Creek 75 65 2 112 122 Silvies River 80 80 4 Trout Creek 3 45 215

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

# BASIC DATA SUPPLEMENT 1

NOW	1.5	IIS YE	AN		REC.	SNOW	[ ''	HIS YE	:AR `	PAST	T REC
RAINAGE BASIN and/or SNOW COURSE	Date of	Snow Depth			Content hes)	DOALNAGE DAGW			Water	Water (	Conte
		(In.)	(In.)	Last Yr.		DRAINAGE BASIN and/or SNOW COURSE	of Survey	Depth (In.)		Last Yr.	Ave
OWYHEE, MALHEUR Antelope Ridge (Ida.) Battle Creeke (Ida.) Bear Creeke (Nev.) Blue Mountain Springs Blue Mtn. Springs Pillow* Buck Pasturee Buckskin, Lower (Nev.) Buckskin, Upper (Nev.) Bull Basine (Ida.) Bully Creeke	WATE 3/28 3/30 3/30 3/23 3/29 3/29 4/3 3/27 3/27 3/30 4/3	RSHE  18 3 73 33 35 0 28 37 0 0	DS 6.7 0.8 22.8 8.4 11.8 10.7 0.0 8.3 12.0 0.0 0.0	9.5 0.0 25.1 10.3 19.0 11.9 0.0 3.9 13.3 T	4.0 h 2.0 m 19.1 8.1 15.5  2.2 m 7.0 9.2 0.4 m 0.7 m	Aneroid Lake #1 Aneroid Lake #2 Anthony Lake Bald Mountaine (Ore.) Beaver Reservoir Beaver Reservoir (Alt.) Big Sheepe Blue Mtn. Summit Bourne County Line	3/28 3/27 3/28 3/27 3/27 3/27 4/2 3/30 3/29 3/30	NDE 1 81 68 59 51 19 24 63 18 29 4	27.4 24.4 18.8 16.8 5.9 6.7 20.8 5.3 9.6 1.5	46.2 39.4 37.8 33.6 16.8 19.8 23.3 8.0 17.5	37 32 27 24 11 -23 7 15
Call Meadow e Columbia Basin (Nev.) Cottonwood-Indian (Nev.) Crane Prairie Disaster Peak (Nev.) Cladorado Pass Cawn Creek (Nev.) Cish Creek Cish Creek Pillow* Cish Creek (Nev.) Cry Canyon (Nev.) Cold Creek (Nev.) Cry Canyon (Nev	4/3 3/29 3/26 3/29 3/24 4/3 4/3 4/3 4/3 3/30 3/21 3/23 3/28 3/28 3/28 3/29 4/3 3/30 3/29	0 40 73 69 0 39 25 19 52 3 14 36 76 19 27 9 0 12	0.0 6.7 12.1 0.0 13.2 26.3 26.7 24.1 0.0 11.7 8.5 5.3 15.8 0.8 4.0 11.7 25.4 6.6 8.7 3.1 0.0 3.4	3.4 0.0 8.7 13.5 0.0 0.0 30.7 43.3 34.4 0.0 8.2 2.6 3.7 18.1 3.8 0.0 9.7 33.9 9.4 6.0 7.3 0.0	25.0 1.8 m 8.9 h 6.3 4.7 12.6 h 2.0 m 2.8 9.8 7.2 h 7.2 h 1.6 m	Dooley Mountain Eilertson Meadows Eldorado Pass Gold Center Goodrich Lake Intake House Little Alps Little Antone Lucky Strike Lucky Strike Pillow* Meacham Mirror Lakee Moss Spring Power Plant Schneider Meadows Schoolmarm Standleye Taylor Green Tipton Tipton Snow Pillow* Tollgate TV Ridgee	3/29 3/28 3/29 3/30 3/28 3/28 3/29 3/29 3/27 4/2 4/2 3/28 3/26 3/30 4/2 4/2 4/2 4/2 4/2 4/2	22 0 26 74 20 31 T 29 7 135 52 0 73 3 74 37 21	0.0 8.5 28.6 5.6 8.2 T 8.2 5.1 2.2 52.6 17.2 0.0 28.1 1.0 28.9 12.2 7.6 10.8 15.0	7.7 10.7 0.0 12.5 52.1 10.0 24.4 4.1 19.0  12.6 0.0 33.4 0.5 47.0 23.2 10.1	7 11 0 12 36 - 14 - 13 - 9 66 24 - 29 4 30 16 9 - 26
Martin Creek (Nev.) Merritt Mountaine (Nev.) Midas (Nev.) Mud Flat (Ida.) Oregon Canyone Quinn Ridgee (Nev.) Red Canyon (Ida.) Rock Spring Rodeo Flat (Nev.) Gilver City (Ida.) Silvies Silvies Pillow* Silvies Pillow* Silvies Pillow* Silvies Pillow* Silvies (Nev.) Stag Mountain #2 (Ida.) Stag Mountaine (Nev.) Stinking Water Succor Creeke (Ida.) Taylor Canyon (Nev.) Tremewan Ranch (Nev.) Trianglee (Ida.) Trout Creeke Vu'' Lakee Vaught Ranche (Ida.) War Eaglee (Ida.)	3/27 3/24 3/29 3/28 4/3 3/29 3/30 4/3 4/3 4/3 4/3 3/29 3/30 3/27 3/24 3/23 3/30 4/3 4/3 3/30 4/3 4/3 3/30	0 20 10 23 37 33 41 34 29 28 0 10 20 43 0 0 45 34 3	5.4 4.9 4.8 10.5 0.0 6.8 4.0 7.7 12.1 10.5 13.9 16.8 11.9 9.4 8.7 0.0 3.4 7.0 14.2 0.0 0.0 15.7 11.9 0.8	1.1 0.0 6.8 1.7 3.0 16.5 26.0 19.4 34.1 16.6 19.0 0.0 0.0 4.6 0.0 3.4 0.0 0.0	1.6h	UMATILLA, WALLA WALLA LOWER JOHN DAY W Arbuckle Mountain Arbuckle Mtn. Pillow* Battle Mountain Summit Blue Mountain Camp Butte Creek Summit Emigrant Springs High Ridge Pillow* Lucky Strike Lucky Strike Pillow* Meacham Tollgate Weston Mountain		0 12 0 29	7.0 18.2 0.0 6.6 0.0 8.2 5.1 2.2 15.0	12.1 36.0 T 22.2 T 39.6 19.0	1 14 3 - 13 - 9 26
*Manometer Reading.											

# BASIC DATA SUPPLEMENT 1 APRIL 1, 1973

SNOW	TH	IIS YE.	AR	PAST	r REC.	SNOW	TI	HIS YE	EAR	PAST	r REC.
DRAINAGE BASIN and/or SNOW COURSE		Snow	Cont	(inc	Content thes)	DRAINAGE BASIN and/or SNOW COURSE	of	Snow	Cont.	(inc	Conten hes)
	Survey	(ln.)	(ln.)	Last Yr.	Ave i		Survey	(ln.)	(ln.)	Last, Yr.	Ave:
UPPER JOHN DAY	WATE	RSHED	)S			HOOD, MILE CREEKS,	I OWE	R DE	SCHILL	EC	
Anthony Lake	3/28	T -	-	37.8	27.7	WATERS		I DL	JGIOI	LO	
Arbuckle Mountain	3/30	18			11.3	Brooks Meadows	3/21	11			11.4
Arbuckle Mtn. Pillow* Battle Mountain Summit	3/30 3/27	0	18.2	36.0 T	$\begin{vmatrix} \\ 1.3 \end{bmatrix}^m$	Clear Lake (Experimental)	3/22 3/22	1		10.6	
Beech Creek Summit	3/30	7	3.8	_	3.6	Cooper Spur	3/30		4.7		
Blue Mountain Springs	3/29	35		19.0		Greenpoint	3/29	16	6.4	10.9	17.5
Blue Mtn. Springs Pillow* Blue Mountain Summit	3/29 3/30	18	10.7	11.9	7.4	Knebal Springs Parkdale	3/21	5	1.2	i	7.
Butte Creek Summit	c	10	3.3	0.0	/ . 4	Phlox Point	3/30 3/22	84	0.0	0.0	62.
Derr	3/27	22	7.5		9.5	Red Hill	3/30	57	21.2	62.3	43.
Gold Center Indian Creek Butte	3/29 4/3	26			12.3   23.6 <sup>m</sup>	Still Creek Still Cr. Alt. #2	3/22	28	1	33.8	
Izee Summit	3/28	23	6.2		7.5	Switchback	3/22 3/29	16	1	34.3	-
Lucky Strike	3/29	29	8.2		13.6 h	Tilly Jane	3/17	66	20.9	48.3	
Lucky Strike Pillow* Marks Creek	3/29 3/27		5.1	0.0	1.7	Ulrich Ranch Junction Umbrella Falls	3/21	79		0.0	3.
Marks Creek Ochoco Meadows	3/31	0 19	6.4	3	9.3	Upper Valley	3/29 3/30	1	1	i .	- :
Olive Lake <sup>e</sup>	3/29	30	9.9	21.0	21.7		,				
Schoolmarm	3/30	3	1.0		4.2						
Snow Mountain Snow Mtn. Pillow**	3/29 3/26	33		15.2 14.3	12.9				ĺ		
Starr Ridge	3/28	8	2.8		4.1	WILLAMETTE V	I	i			
Tipton	4/2	21		10.1	9.6	Cascade Summit	3/30		18.1		
Fipton Snow Pillow* Williams Ranch	4/2 3/30		10.8	0.0	3 7	Champion Clackamas Lake	3/29 3/30	49	18.7	16.0	
	0,00		0.0	0.0		Clear Lake	3/22	5	1.8	10.6	10.
						Clear Lake (Expt.)	3/22			18.8	
						Dead Horse Grade Detroit (Town)	3/31 3/30			23.5	
						Detroit Dam	3/30	0	0.0	0.0	0.
						Golden Curry Creek	3/29			T	
UPPER DESCHUTES, CRO	OKED	WATE	RSHED	)S		Hogg Pass Lake Harriet	3/30 b	49	17.8	63.3	43.4
Bald Peter	3/30		17.8			Laurel Mountain	3/30		0.0	Т	
Caldwell Ranch	3/29	10	4.1		9.1	Layng Creek	3/29				0.
Cascade Summit Chemult	3/30 4/2	51	5.1		30.7	Lookout Point Dam Lost Creek Ranch	3/30 3/31	0	0.0	0.0	
Chemult Alternate	4/2	16	6.4			Lund Park	3/29	Ö	0.0	0.0	0.
Derr	3/27		7.5			Marion Forks	3/30		0.0	13.6	
Hogg Pass Hungry Flat	3/30 3/28	49	0.0		43.4	Marys Peak Marys Peak (Alt.)	3/30	, ,	4.6	9.1	14.
Irish-Taylor Pillow**	4/2				39.0	McCredie Springs	3/30	0	0.0	0.0	0.
Marks Creek	3/27			0.0		McKenzie	3/31			67.4	
New Crescent Lake New Dutchman Flat #2	3/28 3/28	16 76	5.7 32.8	80.2	14.5	McKenzie Bridge Mill City	3/31 3/30				
Ochoco Meadows	3/31	19	6.4	8.0		Oakridge	3/30		0.0	0.0	0.
Racing Creek	3/30		6.8			Peavine Ridge Pillow**	4/2	84		21.3 101.4	
Snow Mountain Snow Mtn. Pillow**	3/29 3/26			14.3	12.9	Phlox Point Railroad Overpass	3/22				
Tamarack	3/26			0.0	$4.1^{h}$	Saddle Mountain Pillow**	4/2		0.1	10.8	_
Tangent	3/28				22.0	Salt Creek Falls	3/30			18.5	
Three Creek Butte Three Creek Meadow	3/27	5 23	2.3	7.8		Santiam Junction Seine Creek Pillow**	3/30			33.6	
Three Creek Mdw. Pillow**	4/2			31.5		Still Creek	3/22	28	10.0	33.8	25.
Waldo Lake	3/29				32.4	Still Creek Alt. #2	3/22			34.3	
Willamette Pass Willamette Pass Pillow**	$\frac{3/28}{b}$	73	26.0	57.2	41.6	Timothy Lake Valsetz Summit	4/3 3/30	17 0		21.2	
miliamette rass rillow	0					Valsetz Summit Vida	3/31	0	0.0		0.
						Waldo Lake	3/29		17.6	48.1	32.
						Weaver Creek	3/29 3/31	0			
						White Branch Slide Whitewater Bridge	3/31	T T	0.0		
						Willamette Pass	3/28	1		57.2	
*Morrows to Design						Willamette Pass Pillow**	Ь				
*Manometer Reading.  **Telemetry Reading.											

### BASIC DATA SUPPLEMENT 1

APRIL 1, 1973

THIS YEAR PAST REC.

THIS YEAR PAST REC. SNOW

SNOW

311011		115 1 E			KEC.	311011	'''	115 1 E	ΛN	r A31	KEC.
DRAINAGE BASIN and/or SNOW COURSE	Date	Snow Depth	ľ	(inc	Content thes)	DRAINAGE BASIN and/or SNOW COURSE		Snow Depth	1	Water C (inch	1
	Survey	(ln.)	(ln.)	Last Yr.	Avei		Survey	(In.)	(ln.)	Yr.	Ave. 1
ROGUE, UMPQUA	WATED	CHED	 			KLAMATH WATE	DCUEN	C			
Althouse	3/29	1 "	8.2	0.0	7.2	Annie Spring	1 .	1	37 /	52.0	15 6
Althouse #2	3/29	19	7.2			Billie Creek Divide	3/30	48		27.8	
Annie Spring	3/30			52.0	45.6	Chemult	4/2	13	5.1	3.6	1
Beaver Dam Creek	3/30	30	9.0		12.4 m	Chemult (Alternate)	4/2	16	6.4		
Big Red Mountain Billie Creek Divide	3/27 3/30	67		29.5	30.9	Chiloquin (PP&L) Cold Springs Camp	3/28	60	25.3	0.0	$\begin{bmatrix} T \\ 33.6 \end{bmatrix}$
Caliban	3/30	80		37.2		Cold Springs Camp Pillow**	4/2	09	25.9		33.0
Champion	3/29	49			30.2	Crazyman Flat <sup>e</sup>	3/29	18			10.5
Cold Springs Camp	3/28	69			33.6h	Crowder Flat <sup>e</sup> (Calif.)	3/27	0	0.0	0.0	
Cold Springs Camp Pillow**	4/2	21		34.5	   0 7h	Crystal (PP&L)	3/30	9	4.7	0.0	
Deadwood Junction Diamond-Crater Summit	3/30 3/27	63	7.4	18 6	8.7 <sup>h</sup> 37.7 <sup>h</sup>	Diamond-Crater Summit Diamond-Crater Vum. Alt.	3/27 3/27	63 56	1		37.7
Diamond-Crater Sum. Alt.	3/27	56		42.3		Diamond Lake Jct. (97)	3/27	T	T.		1 5
Diamond Lake	3/27		11.6	25.6	22.8	Dog Hollow e	3/27	0	0.0	0.0	0.4.
Fish Lake	3/30	28			12.8h		3/29	45	1		15.9
Fourmile Lake	3/30	55			25.2h 29.2	Fort Klamath (PP&L) Fourmile Lake	3/31 3/30	55	0.5		1 3
Grayback Peak Howard Prairie Reservoir	3/26 3/30	49	6.7				4/3	0	0.0	0.0	
Hyatt Prairie	3/30	18	5.6	1		Harriman (PP&L)	3/31	0	0.0	0.0	0.9
King Mountain #1	3/30	25	6.2	Т		Hyatt Prairie Reservoir	3/30	18	5.6	Т	1 1
King Mountain #2 King Mountain #3	3/30	14	3.7	0.0		Kirk (PP&L) Lake of the Woods	3/31 3/30	21	0.0	8.6	2.07
King Mountain #4	3/30	0	0.0	0.0		Park Headquarters	3/29	3	47.4		
King Mountain #5	3/30	0	0.0	0.0		Quartz Mountain	3/28	12	4.3	0.0	1 1
King Mountain #6	3/30	0	0.0	1		Quartz Mountain (Ext.)	3/28		4.3	0.0	
Little Red Mountain	3/27	46		22.9	25.3	Seven Lakes #2	3/21	87	31.9		42.3
Mt. Ashland Switchback Mule Creek	3/28 3/30	83	0.7	33.7		Seven Mile   State Line (Calif.)	3/22 3/27	74	25.8	37.9	
North Umpqua	4/2	17	ı	1	13.6	Strawberry	3/28	23	7.0	1.9	
Page Mountain	3/29	3	0.8	0.0	4.3 h		3/27	13	4.0	2.3	
Park Headquarters	3/29		47.4		58.6	Summer Rim	3/28	41		18.3	1
Red Butte #1 Red Butte #2	3/29 3/29	28 15	8.9	9.5	$\begin{vmatrix} 16.2^h \\ 9.3^h \end{vmatrix}$	Summer Rim Pillow* Summer Rim <sup>e</sup>	3/28 3/29	43		19.8	
Red Butte #3	3/29	3	0.7		7.5h	Sycan Flate	3/29	4	1.1		5.3
Red Butte #4	3/29		0.0	0.4			3/29	1	0.3	T	$ 3.5 ^{h}$
Red Butte #5	3/29		0.0								
Red Butte #6 Seven Lakes #2	3/29 3/21		0.0		$\begin{bmatrix} 0.0^{m}_{1} \\ 42.3 \end{bmatrix}$						
Seven Mile	3/22			37.9		LAVE COLDITY COOCE	TANE	WATE	DCHED	C	
Silver Burn	3/30	12	3.8	7.5	12.0	LAKE COUNTY, GOOSE	I	1 1		1	
Siskiyou Summit	3/29					Adin Mountain (Calif.)	4/2 3/29			11.4	
Siskiyou Summit Alt. #2 Ski Bowl Road	3/29 3/28		T 20.0	1		Bald Mountain (Nev.) Bear Flat Meadow e	3/29				10.97
South Fork Canal	3/30		ì			Camas Creek	3/28	27	8.3	7.2	9.7
Trap Creek	4/3	10			$10.5^{h}$		3/30				15.0
Whaleback	3/29	66	23.7	35.7	34.1	Colvin Creek <sup>e</sup> Cox Flat <sup>e</sup>	3/29 3/27				6.7.
						Crowder Flate (Calif.)	3/27			0.0	1.4
						Dismal Swampe (Calif.)	3/29	59	18.9	21.6	17.6
					1	Finley Corrals <sup>e</sup>	3/29				15.9
						Hart Mountain <sup>e</sup> Little Bally Mtn. <sup>e</sup> (Nev.)	3/29 3/29		1.8 3.4		1 77
						Mt. Bidwell (Calif.)	3/28				)
						North Star (Calif.)	3/28	47	16.3		
						Patton Meadows e	3/27				14.5
						Quartz Mountain Quartz Mountain (Ext.)	3/28				4.9
						Sherman Valley e	3/29		11.8	13.2	11.6
						Silver Creek	3/30	T	T	0.0	1.2
						State Line (Calif.)	3/27				
						Strawberry	3/28 3/27				
						Strawberry e Summer Rim	3/28			18.3	
						Summer Rim Pillow*	3/28		10.9	19.8	
*Manometer reading.						Summer Rim e	3/29			13.6	
				1	1	Sycan Flate	3/29		1.1	1.5	5.3
**Telemetry reading.	1				1	Willow Creek <sup>e</sup>	3/29	7	2.0	0.0	3.2,

### BASIC DATA SUPPLEMENT 1 APRIL 1, 1973

NOW	TH	IIS YE.	AR '	PAST		SNOW	[	HIS YE	AR		REC
RAINAGE BASIN and/or SNOW COURSE	Date	Snow	Water Cont.		Content hes)	DRAINAGE BASIN and/or SNOW COURSE		Snow Depth	Water Cont.	Water C	Contenes)
RAINAGE BASIN and 61 SNOW COOKSE	Survey	(In.)	(ln.)	Last Yr.	Avei	DRAINAGE BASIN SING COURSE	Survey		(ln.)	Last Yr.	Av
HARNEY BASIN Notes that the state of the sta	WATER  3/29 3/29 4/3 4/3 3/29 4/3 3/29 4/3 3/29 3/29 3/29 3/29 3/29 3/29 3/29 3/	35 0 0 4 13 0 35 0 73 69 6 0 0 23 19 30 10 41 34 33 8	11.8 10.7 0.0 0.0 1.4 4.2 0.0 12.1 0.0 26.3 26.7 24.1 1.8 0.0 0.0 6.2 6.6 10.5 4.0 13.9 16.8 11.9 10.6 8.3 2.8	0.0 0.0 4.0 0.0 13.5 0.0 30.7 43.3 34.4 0.0 0.0 4.7 9.4 1.1 1.7 19.4 34.1 16.6 15.2 14.3 5.0 0.0	2.2 <sup>m</sup> 0.0 <sup>m</sup> 3.0 <sup>m</sup> 6.8 <sup>h</sup> 0.0 <sup>m</sup> 9.5 1.8 <sup>h</sup> 25.0 0.9 <sup>m</sup> 4.2 7.5 9.3 4.4 <sup>m</sup> 4.3 12.3 12.9 4.1 0.3 <sup>h</sup> 7.9 <sup>m</sup>						

# BASIC DATA SUPPLEMENT 2 APRIL 1, 1973

#### SOIL MOISTURE

DRAINAGE BASIN	and/or STATION			e (Inches)	Date of		l Moisture (In	
Name		Elevation	Depth	Capacity	Survey	This Year	Last Year	Average i
	OH	YYHEE, MA	LHEUR WAT	ERSHEDS				:
Bear Creek (Nev.)		7800	72	16.8	3/28	9.6	11.0 f	$12.9^{h}_{h}$
Big Bend (Nev.)		6700	48	16.7	3/23	12.0	14.9	15,9 <sup>h</sup>
Blue Mountain Spring		5900	42	16.9	3/29	6.6	13.1	11.2
Crane Prairie Jordan Valley		5375 4390	48 48	18.2 19.3	3/29 3/29	15.1 16.5	17.9 16.6	16.3
Mud Flat (Ida.)		5500	48	12.8	3/28	11.2	14.0 f	13.2
Rodeo Flat (Nev.)		6800	42	11.0	3/21	4.1	7.8	10.8
Taylor Canyon (Nev.)		6200	48	15.1	3/27	12.6	13.5	14.0 h
	BURNT, POWDER,	DINE CE	ANDE DOND	E TMNAHA	WATEDSHED	C		
Blue Mountain Summit	DURNI, POWDER,	5100	36	16.8	3/30	9.8	16.0	11.5
Dooley Mountain		5430	36	9.2	3/30	3.3	7.0	4.5
Emigrant Springs		3925	48	22.3	3/27	21.1	20.4	20.2
Ladd Summit		3730	48	18.9	3/28	10.3	13.3	11.1
Moss Springs		5850	36	25.8	4/2	14.5	16.3	
Tollgate		5070	48	23.6	3/29	17.2	17.1	19.5
III	MATILLA, WALLA W	JAI.I.A. WT	L.L.OW ROC	LOWER .T	OHN DAY W	ATERSHEDS		
Battle Mountain Summit	attribut, when	4340	48	13.8	3/27	13.7	13.7	13.3
Emigrant Springs		3925	48	22.3	3/27	21.1	20.4	20.2
Tollgate		5070	48	23.6	3/29	17.2	17.1	19.5
					-, -			
	U		N DAY WATI					
Battle Mountain Summit			48		3/27	13.7	13.7	13.3
Beech Creek		4800	48	21.3	3/30	15.8	20.4	14.4
Blue Mountain Spring		5900	42	16.9	3/29	6.6	13.1	11.2
Blue Mountain Summit Derr		5100 5670	36 24	16.8 9.0	3/30 3/27	9.8 7.9	16.0 8.3	11.5
Marks Creek		4540	36	14.1	3/27	10.3	13.3	12.6
Snow Mountain		6300	48	16.7	3/29	12.1	16.2	14.2
Starr Ridge		5150	36	10.6	3/28	9.6	10.6	10.0
Williams Ranch		4500	42	17.9	3/27	17.4	17.8	17.2
	IMPER	DECCULOR	CDOOVED	MATERIA	nc.			
Derr	UPPER	5670	24 _	WATERSHEI 9.0	3/27	7.9	8.3	
Marks Creek		4540	36	14.1	3/27	10.3	13.3	12.6
Snow Mountain		6300	48	16.7	3/29	12.1	16.2	14.2
	HOOD, MILE							
Cooper Spur		3490	72	26.4	3/30	14.2	14.2	
		KLAMAT	H WATERSH	EDS				
Quartz Mountain		5230	48	15.3	3/28	7.3	10.3	8.8
(					, = 2			

#### **BASIC DATA SUPPLEMENT 2**

APRIL 1, 1973

#### SOIL MOISTURE

DRAINAGE BASIN and/or ST		Profile (Inches)			Soil Moisture (Inches)				
Name	Elevation	Depth	Capacity	Date of Survey	This Year	Last Year	Average i		
							T		
·	LAKE COUNTY, G	OOSE LAKE	WATERSHED	S					
Camas Creek	5720	42	14.5	3/28	12.9	13.2	12.5		
Quartz Mountain	5230	48	15.3	3/28	7.3	10.3	8.8		
	HARNEY B	ASIN WATE	RSHEDS						
Blue Mountain Spring	5900	42	16.9	3/29	6.6	13.1	11.2		
Fish Creek	7900	48	15.0	4/3	13.4	10.1			
Silvies Snow Mountain	6900 6300	48 48	16.4 16.7	4/3 3/29	15.9 12.1	16.0 16.2	13.1		
Starr Ridge	5150	36	10.6	3/28	9.6	10.6	10.0		
Willow-Bald	5000	24	6.6	3/29	4.5	6.6	5.6		
						1			
					,				
	٠		i						
·									

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

#### **BASIC DATA SUPPLEMENT 3**

APRIL 1, 1973

RECIPITATION (Inches)		CURRENT IN	FORMATION	PAST R	ECORD
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Precip- itation	Last Year	Averag
Allison Work Center (Harney County)	5320	2/27 to			
Althouse (Josephine County)	4530	3/29/73 2/27 to	5.06	6.39	
neroid Lake #2 (Wallowa County)	7400	3/29/73 2/28 to	4.73	6.30	
rbuckle Mountain (Morrow County)	5400	3/27/73 2/28 to	2.50		
ig Red Mountain (Jackson County)	6240	3/30/73 2/27 to	1.82	4.49	•
rooks Meadow (Hood River County)	4520	3/27/73 2/22 to	2.00		
amas Creek (Lake County)	5825	3/21/73 2/28 to	0.56	9.00	
ounty Line (Umatilla CountyStarkey Hdqs.)	4800	3/28/73 2/27 to	2.50	4.90	
err (Wheeler County)	5800	3/30/73 2/23 to	.00		
oodrich Lake (Baker County)	6775	3/27/73 2/27 to	1.25		
ucky Strike (Umatilla County)	5050	3/30/73 2/27 to	6.44		
uartz Mountain Summit (Lake County)	6300	3/29/73 2/28 to	2.10		
ilver Creek (Lake County)	4900	3/28/73 2/27 to	2.43	2.63	
trawberry (Lake County)	5760	3/30/73 2/28 to	1.85	2.00	
ummer Rim (Lake County)		3/28/73	2.20	3.15	
	7200	3/5 to 3/28/73	3.00		
aylor Butte (Klamath County)	5040	2/26 to 3/29/73	1.40	4.30	
aylor Green (Union County)	5800	2/26 to 4/2/73	2.20	6.10	
ipton (Baker County)	5100	2/26 to 3/30/73	2.25	3.94	

<sup>(</sup>a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



LOCATION ELEV MLABER NAME LOCATION ELEV NUMBER NAME LOCATION ELEV NUMBER NAME LOCATION ELEV NUMBER NAME LOCATION  **RRE**  **RRE**  **RRE**  **RRE**  **RRE**  **COMMON TO A CONTROL OF THE PROCESS OF TH	ELEV NUMBER NAVE LOCATION ELEV NUMBER NAVE
OWYHEE, MALHEUR WATERSHEDS (1)  Owyhee River  Info5a Oregon Canyon  Red Canyon (Ida) 34 95 2W 5500  18E26 Flag Prairie  32 165 36E 4750  18E26 Flag Prairie  32 165 36E 4750  18E20 Eldorado Pass  Flag Prairie  32 165 36E 4750  18E30 Little Alps  10 75 37  18E20 Little Alps  18E20	Cocation   Cocation
Slue Kin Lower   (Nev ) 25 45N 39E 6700   1661P   South Mountain No.2 (Ida) 10 85 5N 6340   16	Upper John Day River    1902P
Fax Creek (Nev) 31 43N 54E 6700 16G12a Vaught Ranch (Ida) 10 11s 1W 5950 18EB Gold Center 21 9s 36E 5340 18020 Meacham 5now Fillow 35 1s 35E 5100 1805 Meacham 5now Fi	18E8   Gold Center   21 95 36E 5340
18   18   18   18   18   18   18   18	19E7H   Starr Ridge   20   155   31E   5150   34   105   35½   65100   34   105   35½   65100   18E25MP   Williams Ranch   20   155   32E   4500   22F0   Golden Curry Creek   1   23S   1E   316   22F10
24 23 22 21 20 19 18 17 16  Umatilla River  Umatilla River  1902P Arbuckle Mountain 33 45 29 18012MP Battle Mountain Summit 29 35 1804M Entigrant Springs 29 1N 35 18019 High Ridge Pillow 31 3N 38 18019 High Ridge Pillow 31 3N 38 18019 Lucky Strike 28 35 32 1805 Meacham 24 15 35	2273   Cascade Summit   7   235   6E   4880   Mory s River   2068MP   Camas Creek   5   395   21E   5720
D   18020   Meacham Snow Pillow   35 18	Also   21813*   Three Creeks Meadows   34   165   9E   5650
Legeno  Legeno  Legeno  Legeno  Lower  Deschutes  Deschutes  Lower  Lower  Deschutes  Lower  Deschutes	19E4   Tamarack   8   15S   25E   4800   2364P   Althouse   17   41S   7M   4530   20610a   Snerman Valley   15   37S   21E   6600
2155 [3166]  2165 [2166]  2165	21025M   Coper Spur   6 25 10E 3490   22G12   Fournile Lake   9 365 5E 6000   20G13a   Sycan Flat   25 31S 14E 5500     2101
22513 227 227 227 227 227 227 227 227 227 22	21021   Ulrich Ranch Junction   28   15   11E   3350   22G1   Seven Lakes No. 2   26   33S   5E   6200   Guono Loke
Gaase Lake  22722 2275 22724,2526  62713	22F9   Champion   12 23S   1E 4500   18F7a   Call Meadows   29 20S 33E 5340
Bosin (1667)    18670	Sandy River   22F23   Red Butte No. 1   36 275 2W 4560   19F4m   Willow-Bald   19 225 29E 5000     2108* Phlox Point   7 35 9E 5400   22F25   Red Butte No. 3   30 275   W 3500   22F26   Red Butte No. 4   30 275   W 3000   22F26   Red Butte No. 5   20 275   W 3000   22F26   Red Butte No. 5   20 275   W 3000   22F27   Red Butte No. 5   20 275   W 3000   22F27   Red Butte No. 6   17 275   W 2000   18F6a   Buck Pasture   28 295 35E 5300     WILLAMETTE WATERSHEDS (a)   22F17   Trap Creek   1 275 4E 3800   19G1a   Hart Mountain   1 365 25E 6350   19G1mPA   Silvies   35 325 33E 6900   19G1mPA   Silvi
ENOW COURSES AND RELATED  DATA MEASURING SITES  2006. / 1006 2007 2008   1006	21013   Clackamas Lake   35   58   815   3400
OREGON  South Special	22E1



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Soil Conservation Service
Department of Commerce
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The Crag Rats, Hood River, Oregon

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